

## Refine Search

### Search Results -

Term	Documents
(72 AND 40).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	8
(L72 AND L40).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	8

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L76

Refine Search

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### Search History

DATE: Thursday, November 16, 2006    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

**Set**  
**Name Query**  
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**Hit**  
**Count**  
**Set**  
**Name**  
 result  
 set

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ

<u>L76</u>	L72 and L40	8	<u>L76</u>
<u>L75</u>	L72 and L40 and L42	1	<u>L75</u>
<u>L74</u>	L72 and L39 and L40 and L42	1	<u>L74</u>
<u>L73</u>	L72 and L39 and L40 and L41 and L42	1	<u>L73</u>
<u>L72</u>	L71 and statist\$4	66	<u>L72</u>
<u>L71</u>	L70 and L53	92	<u>L71</u>
<u>L70</u>	L69 and L61	92	<u>L70</u>
<u>L69</u>	L55 and pharmaceutical	1636	<u>L69</u>
<u>L68</u>	L67 and L61	14	<u>L68</u>
<u>L67</u>	L55 and (fNMR or fmri)	200	<u>L67</u>
<u>L66</u>	L61 and L55 and fNMR	0	<u>L66</u>

<u>L65</u>	L63 and fNMR	0	<u>L65</u>
<u>L64</u>	L62 and (pharmaceutical near preparation)	11	<u>L64</u>
<u>L63</u>	L62 and (chemical or drug or pharmaceutical)	241	<u>L63</u>
<u>L62</u>	L61 and L55	360	<u>L62</u>
<u>L61</u>	L53 and L52	35331	<u>L61</u>
<u>L60</u>	L59 and L44	11	<u>L60</u>
<u>L59</u>	L55 and L39 and L40 and L43	39	<u>L59</u>
<u>L58</u>	L57 and L51	1	<u>L58</u>
<u>L57</u>	L55 and L53	360	<u>L57</u>
<u>L56</u>	L55 and L51	5	<u>L56</u>
<u>L55</u>	(324/300  324/301  324/302  324/303  324/304  324/305  324/306  324/307  324/308  324/309  324/310  324/311  324/312  324/313  324/314  324/315  324/316  324/317  324/318  324/319  324/320  324/321  324/322 or 600/410  600/420  600/422  600/412 or 436/173 or 702/19).ccls.	14915	<u>L55</u>
<u>L54</u>	L53 and L51	5	<u>L54</u>
<u>L53</u>	(computer adj read\$4 adj storage)	35331	<u>L53</u>
<u>L52</u>	(computer and read\$4 and storage)	515659	<u>L52</u>
<u>L51</u>	L39 and L40 and L41 and L42 and L43 and L44	253	<u>L51</u>
<u>L50</u>	L49 and blood	230	<u>L50</u>
<u>L49</u>	L48 and L44	253	<u>L49</u>
<u>L48</u>	L47 and L43	1179	<u>L48</u>
<u>L47</u>	L46 and L42	3332	<u>L47</u>
<u>L46</u>	L45 and L41	22883	<u>L46</u>
<u>L45</u>	L39 and L40	81436	<u>L45</u>
<u>L44</u>	(magnetic adj resonance)	97872	<u>L44</u>
<u>L43</u>	(pharmaceutical with preparation)	114193	<u>L43</u>
<u>L42</u>	((neuronal) with (structure or area or activity))	8657	<u>L42</u>
<u>L41</u>	(correlation or statistic\$3)	439910	<u>L41</u>
<u>L40</u>	(nerve or neuron or neutonal)	116543	<u>L40</u>
<u>L39</u>	(drug or chemical or pharmaceutical)	3499823	<u>L39</u>
<u>L38</u>	L34 and L2	8	<u>L38</u>
<u>L37</u>	L34 and L2 and L4	1	<u>L37</u>
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<u>L35</u>	L34 and L1 and L2 and L3 and L4	1	<u>L35</u>
<u>L34</u>	L33 and statist\$4	66	<u>L34</u>
<u>L33</u>	L32 and L15	92	<u>L33</u>
<u>L32</u>	L31 and L23	92	<u>L32</u>
<u>L31</u>	L17 and pharmaceutical	1636	<u>L31</u>
<u>L30</u>	L29 and L23	14	<u>L30</u>
<u>L29</u>	L17 and (fNMR or fmri)	200	<u>L29</u>
<u>L28</u>	L23 and L17 and fNMR	0	<u>L28</u>
<u>L27</u>	L25 and fNMR	0	<u>L27</u>

<u>L26</u>	L24 and (pharmaceutical near preparation)	11	<u>L26</u>
<u>L25</u>	L24 and (chemical or drug or pharmaceutical)	241	<u>L25</u>
<u>L24</u>	L23 and L17	360	<u>L24</u>
<u>L23</u>	L15 and L14	35331	<u>L23</u>
<u>L22</u>	L21 and L6	11	<u>L22</u>
<u>L21</u>	L17 and L1 and L2 and L5	39	<u>L21</u>
<u>L20</u>	L19 and L13	1	<u>L20</u>
<u>L19</u>	L17 and L15	360	<u>L19</u>
<u>L18</u>	L17 and L13	5	<u>L18</u>
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<u>L16</u>	L15 and L13	5	<u>L16</u>
<u>L15</u>	(computer adj read\$4 adj storage)	35331	<u>L15</u>
<u>L14</u>	(computer and read\$4 and storage)	515659	<u>L14</u>
<u>L13</u>	L1 and L2 and L3 and L4 and L5 and L6	253	<u>L13</u>
<u>L12</u>	L11 and blood	230	<u>L12</u>
<u>L11</u>	L10 and L6	253	<u>L11</u>
<u>L10</u>	L9 and L5	1179	<u>L10</u>
<u>L9</u>	L8 and L4	3332	<u>L9</u>
<u>L8</u>	L7 and L3	22883	<u>L8</u>
<u>L7</u>	L1 and L2	81436	<u>L7</u>
<u>L6</u>	(magnetic adj resonance)	97872	<u>L6</u>
<u>L5</u>	(pharmaceutical with preparation)	114193	<u>L5</u>
<u>L4</u>	((neuronal) with (structure or area or activity))	8657	<u>L4</u>
<u>L3</u>	(correlation or statistic\$3)	439910	<u>L3</u>
<u>L2</u>	(nerve or neuron or neutonal)	116543	<u>L2</u>
<u>L1</u>	(drug or chemical or pharmaceutical)	3499823	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

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Search Results - Record(s) 1 through 11 of 11 returned.

☐ 1. Document ID: US 20060106543 A1      Relevance Rank: 88

L26: Entry 3 of 11

File: PGPB

May 18, 2006

PGPUB-DOCUMENT-NUMBER: 20060106543

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060106543 A1

TITLE: Method for analyzing effectiveness of pharmaceutical preparation

PUBLICATION-DATE: May 18, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Deco; Gustavo	Vilassar de Mar		ES
Galm; Norbert	Zorneding		DE
Stetter; Martin	Munchen		DE

APPL-NO: 10/524000      [PALM]

DATE FILED: July 24, 2003

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
DE	102 36 630.6	2002DE-102 36 630.6	August 9, 2002

PCT-DATA:

DATE-FILED	APPL-NO	PUB-NO	PUB-DATE	371-DATE
Jul 24, 2003	PCT/DE03/02497			Oct 11, 2005

INT-CL-PUBLISHED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G06F19/00	20060101	G06F019/00

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	G06 F 19/00	20060101

US-CL-PUBLISHED: 702/019

US-CL-CURRENT: 702/19

## ABSTRACT:

The activity of a pharmaceutical preparation or medicament on a neuronal structure is analyzed by subjecting a neuronal structure to the influence of a pharmaceutical preparation. Signals describing neuronal activities in the neuronal structure under the influence of the pharmaceutical preparation are detected and statistically evaluated to determine indicators for the neuronal structure under the influence of the pharmaceutical preparation. The indicators describe the activity of the pharmaceutical preparation.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWAC	Draw.D
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☐ 2. Document ID: US 20030032065 A1      Relevance Rank: 76

L26: Entry 9 of 11

File: PGPB

Feb 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030032065

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030032065 A1

TITLE: Ensemble-based strategy for the design of protein pharmaceuticals

PUBLICATION-DATE: February 13, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Hilser, Vince	Galveston	TX	US
Fox, Robert O.	Galveston	TX	US

APPL-NO: 10/096177      [PALM]

DATE FILED: March 12, 2002

## RELATED-US-APPL-DATA:

non-provisional-of-provisional 60275259 20010312 US

INT-CL-PUBLISHED: [07] G01N 33/53, G06G 7/48, G06G 7/58, G06F 19/00, C12P 21/02

## INT-CL-CURRENT:

TYPE	IPC	DATE
CIPS	C07 K 1/00	20060101
CIPS	C07 K 1/04	20060101

US-CL-PUBLISHED: 435/7.1; 435/69.1, 703/11, 702/19

US-CL-CURRENT: 435/7.1; 435/69.1, 702/19, 703/11

REPRESENTATIVE-FIGURES: 1

## ABSTRACT:

The present invention provides a method to generate and analyze ensembles of

peptide and protein conformers and design proteins to exhibit desired characteristics. The present invention is particularly useful in protein pharmaceutical design.

[0001] This application claims priority to U.S. Provisional Application No. 60/275,259, which was filed on Mar. 12, 2001.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIG	Draw
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☐ 3. Document ID: US 6774103 B1      Relevance Rank: 75

L26: Entry 11 of 11

File: USPT

Aug 10, 2004

US-PAT-NO: 6774103

DOCUMENT-IDENTIFIER: US 6774103 B1

TITLE: Compounds for deactivating phospholamban function on Ca-ATPase  
(phospholamban inhibitors)

DATE-ISSUED: August 10, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pollesello; Piero	Grankulla			FI
Ovaska; Martti	Espoo			FI
Tenhunen; Jukka	Klaukkala			FI
Vidgren; Jukka	Helsinki			FI
Yliperttula-Ikonen; Marjo	Espoo			FI
Tilgmann; Carola	Jorvas			FI
Lotta; Timo	Vantaa			FI
Kaivola; Juha	Helsinki			FI

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Orion Corporation	Espoo			FI	03

APPL-NO: 09/722440      [PALM]

DATE FILED: November 28, 2000

PARENT-CASE:

This application is a divisional of application Ser. No. 09/252,063, filed Feb. 18, 1999, now U.S. Pat. No. 6,538,022, which is a continuation-in-part of U.S. application Ser. No. 08/937,117, filed Sep. 24, 1997, now abandoned. The entirety of each of these applications is incorporated by reference herein.

INT-CL-ISSUED: [07] A61K 38/00, C07K 7/00, C07K 14/00

INT-CL-CURRENT:

TYPE IPC                      DATE  
CIPP A61 K 31/35      20060101

invention also relates to methods for rational drug design enabling the design of phospholamban inhibitors based on using the three-dimensional structure data provided on computer readable media, as analyzed on a computer system having suitable computer algorithms. The invention also relates to phospholamban inhibiting compounds with certain structural, physicochemical and spatial characteristics that allow for the interaction of said compounds with specific residues of the active site of phospholamban.

16 Claims, 13 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWAC	Draw D.
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☐ 4. Document ID: US 20060141600 A1      Relevance Rank: 75

L26: Entry 1 of 11

File: PGPB

Jun 29, 2006

PGPUB-DOCUMENT-NUMBER: 20060141600

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060141600 A1

TITLE: Methods and compositions related to argonaute proteins

PUBLICATION-DATE: June 29, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Joshua-Tor; Leemor	Huntington	NY	US
Song; Ji-Joon	Arlington	MA	US
Hannon; Gregory J.	Huntington	NY	US
Liu; Jidong	Cold Spring Harbor	NY	US
Carmell; Michelle A.	Nesconset	NY	US
Rivas; Fabiola	Cold Spring Harbor	NY	US

APPL-NO: 11/192437      [PALM]

DATE FILED: July 28, 2005

RELATED-US-APPL-DATA:

us-provisional-application US 60592269 20040729

us-provisional-application US 60592297 20040728

INT-CL-PUBLISHED:

TYPE	IPC	DATE	IPC-OLD
IPCP	C12N9/22	20060101	C12N009/22
IPCS	G06F19/00	20060101	G06F019/00

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	<u>C12 N 9/22</u>	20060101
CIPS	<u>G06 F 19/00</u>	20060101

US-CL-PUBLISHED: 435/199; 702/019

US-CL-CURRENT: 435/199; 702/19

## ABSTRACT:

This invention provides methods and compositions related to Argonaute proteins and, in certain embodiments, the applications of these methods and compositions to treatment and therapeutics based on RNAi.

## RELATED APPLICATIONS

[0001] This application claims the benefit of priority to U.S. Provisional Patent Application Nos. 60/592,269, filed on Jul. 29, 2004, and 60/592,297, filed on Jul. 28, 2004, which applications are hereby incorporated by reference in their entireties.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw.D
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☐ 5. Document ID: US 20040243319 A1 Relevance Rank: 74

L26: Entry 6 of 11

File: PGPB

Dec 2, 2004

PGPUB-DOCUMENT-NUMBER: 20040243319

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040243319 A1

TITLE: Crystal structure of cytochrome P450

PUBLICATION-DATE: December 2, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tickle, Ian J.	Cambridge		GB
Vonrhein, Clemens	Cambridge		GB
Williams, Pamela A.	Cambridge		GB
Kirton, Stewart B.	Cambridge		GB
Jhoti, Harren	Cambridge		GB

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	COUNTRY	TYPE CODE
ASTEX TECHNOLOGY LTD.	Cambridge		GB	03

APPL-NO: 10/690991 [PALM]

DATE FILED: October 23, 2003

## RELATED-US-APPL-DATA:

child 10690991 A1 20031023

parent continuation-in-part-of PCT/GB02/02668 20020530 US UNKNOWN

non-provisional-of-provisional 60479448 20030619 US

non-provisional-of-provisional 60421063 20021025 US



## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
GB	GB 0108214.8	2001GB-GB 0108214.8	April 2, 2001
GB	GB 0108212.2	2001GB-GB 0108212.2	April 2, 2001

INT-CL-PUBLISHED: [07] G06F 19/00, G01N 33/48, A01N 37/18

## INT-CL-CURRENT:

TYPE	IPC	DATE
CIPS	C07 K 14/80	20060101
CIPS	C12 N 9/02	20060101
CIPS	C07 K 14/795	20060101

US-CL-PUBLISHED: 702/027; 702/019, 514/002

US-CL-CURRENT: 702/27; 514/2, 702/19

REPRESENTATIVE-FIGURES: NONE

## ABSTRACT:

The invention provides the crystal structure of the cytochrome P450 3A4 protein molecule. The structure is set out in Table 5. The structure may be used in to model the interaction of compounds such as pharmaceuticals with this protein, and to determine the structure of related cytochrome P450 molecules.

[0001] The present application is a continuation-in-part of applications PCT/GB02/02668 filed May 30, 2002 and designating the US, and Ser. No. 10/221,036, filed Apr. 2, 2002, and claims benefit of the following U.S. Provisional Application Ser. Nos. 60/479,448, filed Jun. 19, 2003; 60/421,063, filed Oct. 25, 2002. U.S. Ser. No. 10/221,036 claims the benefit of priority of 60/306,873, filed Jul. 23, 2001, 60/306,874, filed Jul. 23, 2001, and UK applications GB 0108214.8 filed Apr. 2, 2001 and GB 0108212.2 filed Apr. 2, 2001. The contents of all these applications are incorporated herein by reference.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	LOC	Drawings
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☐ 6. Document ID: US 20040053383 A1 Relevance Rank: 73

L26: Entry 7 of 11

File: PGPB

Mar 18, 2004

PGPUB-DOCUMENT-NUMBER: 20040053383

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040053383 A1

TITLE: Crystals of cytochrome P450 2C9, structures thereof and their use

PUBLICATION-DATE: March 18, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
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☐ 7. Document ID: US 20030170842 A1 Relevance Rank: 73

L26: Entry 8 of 11

File: PGPB

Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030170842  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030170842 A1

TITLE: Crystals of cytochrome P450 2C9, structures thereof and their use

PUBLICATION-DATE: September 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Williams, Pamela A.	Cambridge		GB
Cosme, Jose M.	Cambridge		GB
Ward, Alison J.	Cambridge		GB
Brewerton, Suzanne C.	Cambridge		GB
Hamilton, Bruce J.	Cambridge		GB
Jhoti, Harren	Cambridge		GB
Jones, Michelle A.	Cambridge		GB
Vuillard, Laurent M.M.	Cambridge		GB
Williams, Mark G.	Cambridge		GB

APPL-NO: 10/280137 [PALM]  
DATE FILED: October 25, 2002

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60330585 20011025 US  
non-provisional-of-provisional 60339421 20011214 US  
non-provisional-of-provisional 60341267 20011220 US  
non-provisional-of-provisional 60396588 20020718 US

INT-CL-PUBLISHED: [07] C12N 9/02, G06F 19/00, G01N 33/48, G01N 33/50

INT-CL-CURRENT:

TYPE IPC	DATE
CIPS <u>C07 D 311/56</u>	20060101
CIPS <u>C07 D 311/00</u>	20060101
CIPS <u>C07 K 14/795</u>	20060101
CIPS <u>C07 K 14/80</u>	20060101
CIPS <u>C12 N 9/02</u>	20060101

US-CL-PUBLISHED: 435/189; 702/19

US-CL-CURRENT: 435/189; 702/19

REPRESENTATIVE-FIGURES: NONE

ABSTRACT:

The present invention provides cytochrome 2C9 proteins which have been modified to introduce a proline residue at positions 220 or 222 of the wild type sequence which can be crystallised to provide high resolution structures. The structures may be used for homology modelling of other cytochrome P450 structures such as 2C8, 2C18 and 2C19, and for analysis of the interaction of ligands with P450.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 8. Document ID: US 20060116826 A1      Relevance Rank: 73

L26: Entry 2 of 11

File: PGPB

Jun 1, 2006

PGPUB-DOCUMENT-NUMBER: 20060116826

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060116826 A1

TITLE: Crystals of cytochrome P450 2C9, structures thereof and their use

PUBLICATION-DATE: June 1, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Williams; Pamela Ann	Cambridge		GB
Cosme; Jose Marie	Cambridge		GB
Vinkovic; Dijana Matak	Cambridge		GB
Murray; Christopher William	Cambridge		GB
Jhoti; Harren	Cambridge		GB

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	COUNTRY	TYPE CODE
ASTEX THERAPEUTICS LIMITED	Cambridge		GB	03

APPL-NO: 11/258403      [PALM]

DATE FILED: October 26, 2005

RELATED-US-APPL-DATA:

parent US continuation PCT/GB04/01864 20040430 UNKNOWN  
child US 11258403 A1 20051026  
parent US continuation-in-part 10426058 20030430 PENDING  
child US 11258403 A1 20051026  
parent US continuation-in-part 10280137 20021025 PENDING  
child US 10426058 20030430  
us-provisional-application US 60330585 20011025  
us-provisional-application US 60339421 20011214  
us-provisional-application US 60341267 20011220  
us-provisional-application US 60396588 20020718

INT-CL-PUBLISHED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G06F19/00	20060101	G06F019/00

IPCS C12N9/02 20060101 C12N009/02

## INT-CL-CURRENT:

TYPE	IPC	DATE
CIPS	C12 N 9/02	20060101
CIPP	G06 F 19/00	20060101

US-CL-PUBLISHED: 702/019; 435/189

US-CL-CURRENT: 702/19; 435/189

## ABSTRACT:

The present invention provides co-crystals of cytochrome P450 2C9 proteins and a ligand such as warfarin which has been crystallised to provide a high resolution structure. The structure may be used for homology modelling of other cytochrome P450 structures such as 2C8, 2C18 and 2C19, and for analysis of the interaction of ligands with P450.

[0001] This application is a continuation of PCT/GB2004/001864, which designated the U.S. and was filed Apr. 30, 2004 (pending); the present application is also a continuation-in-part of U.S. application Ser. No. 10/426,058, filed Apr. 30, 2003 (pending), the present application is also a continuation-in-part of U.S. application Ser. No. 10/280,137, filed Oct. 25, 2002 (pending), and U.S. application Ser. No. 10/280,137 claims benefit of priority of U.S. Provisional Application No. 60/330,585, filed Oct. 25, 2001; U.S. Provisional Application No. 60/339,421, filed Dec. 14, 2001; U.S. Provisional Application No. 60/341,267, filed Dec. 20, 2001; and U.S. Provisional Application No. 60/396,588, filed Jul. 18, 2002; the entire contents of each of the above-identified applications being incorporated herein by reference.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 9. Document ID: US 20050032119 A1 Relevance Rank: 73

L26: Entry 5 of 11

File: PGPB

Feb 10, 2005

PGPUB-DOCUMENT-NUMBER: 20050032119

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050032119 A1

TITLE: Crystal structure of cytochrome P450

PUBLICATION-DATE: February 10, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tickle, Ian J.	Cambridge		GB
Vonrhein, Clemens	Cambridge		GB
Vinkovic, Dijana Matak	Cambridge		GB
Kirton, Stewart	Cambridge		GB

reference.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIG	Draw
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☐ 10. Document ID: US 20050221459 A1      Relevance Rank: 73

L26: Entry 4 of 11

File: PGPB

Oct 6, 2005

PGPUB-DOCUMENT-NUMBER: 20050221459

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050221459 A1

TITLE: Geranylgeranyl transferase type I (GGTase-I) structure and uses thereof

PUBLICATION-DATE: October 6, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Taylor, Jeffrey S.	Milford	CT	US
Reid, T. Scott	Durham	NC	US
Beese, Lorena S.	Durham	NC	US

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	COUNTRY	TYPE CODE
Duke University				02

APPL-NO: 10/957517    [PALM]

DATE FILED: October 1, 2004

## RELATED-US-APPL-DATA:

non-provisional-of-provisional 60507685 20031001 US

INT-CL-PUBLISHED: [07] G06F 19/00, G01N 33/48, G01N 33/50, C12N 9/10

## INT-CL-CURRENT:

TYPE	IPC	DATE
CIPS	<u>G01 N 33/50</u>	20060101
CIPS	<u>G06 F 19/00</u>	20060101
CIPS	<u>C12 N 9/10</u>	20060101
CIPS	<u>G01 N 33/48</u>	20060101

US-CL-PUBLISHED: 435/193; 702/019

US-CL-CURRENT: 435/193; 702/19

REPRESENTATIVE-FIGURES: NONE

## ABSTRACT:

Protein geranylgeranyl transferase type I (GGTase-I), a Ca.sub.1a.sub.2X

prenyltransferase, is an essential enzyme in eukaryotes. GGTase-I catalyzes the carboxyl-terminal lipidation of over one hundred proteins, including many GTP-binding regulatory proteins (G proteins). The presently disclosed subject matter comprises a plurality of crystal structures of mammalian GGTase-I in complex with substrates and products that provide the first structural information for this enzyme, facilitating the elucidation of a generalized method of action for all protein prenyltransferases; the method includes a role in product transport. The structures reveal specificity determinants that allow classification of putative protein prenyltransferase sequences and can facilitate optimization of GGTase-I and FTase modulators.

## CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is based on and claims priority to U.S. Provisional Patent application Ser. No. 60/507,685, filed Oct. 1, 2003, herein incorporated by reference in its entirety.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw.D.
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☐ 11. Document ID: US 7127357 B1      Relevance Rank: 73

L26: Entry 10 of 11

File: USPT

Oct 24, 2006

US-PAT-NO: 7127357

DOCUMENT-IDENTIFIER: US 7127357 B1

TITLE: Crystal structure of WW domains and methods of use thereof

DATE-ISSUED: October 24, 2006

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Noel; Joseph P.	San Diego	CA		US
Verdecia; Mark A.	San Diego	CA		US

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
The Salk Institute for Biological Studies	La Jolla	CA		US		02

APPL-NO: 09/733773      [PALM]

DATE FILED: December 8, 2000

## INT-CL-ISSUED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G06N3/00	20060101	G06N003/00
IPCS	G06N7/00	20060101	G06N007/00
IPCS	G06G7/58	20060101	G06G007/58

## INT-CL-CURRENT:

TYPE	IPC	DATE
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14 Claims, 8 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Claims	DOC	Drawings
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Term	Documents
PHARMACEUTICAL	403425
PHARMACEUTICALS	119084
PREPARATION	1773292
PREPN	293531
PREPNS	8919
PREPARATIONS	243734
(24 AND (PHARMACEUTICAL NEAR PREPARATION)) .PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	11
(L24 AND (PHARMACEUTICAL NEAR PREPARATION)) .PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	11

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☐ 1. Document ID: US 6618607 B2 Relevance Rank: 65

L30: Entry 12 of 14

File: USPT

Sep 9, 2003

US-PAT-NO: 6618607

DOCUMENT-IDENTIFIER: US 6618607 B2

TITLE: MRI imaging methods using a single excitation

DATE-ISSUED: September 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Song; Allen W.	Chapel Hill	NC		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Duke University	Durham	NC			02

APPL-NO: 09/978514 [PALM]

DATE FILED: October 15, 2001

PARENT-CASE:

CLAIM OF PRIORITY The present application claims priority from U.S. Provisional Patent Application Serial No. 60/241,999 filed Oct. 20, 2000, the disclosure of which is incorporated by reference herein as if set forth fully herein

INT-CL-ISSUED: [07] A61B 5/05

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPS	<u>G01 R 33/54</u>	20060101
CIPS	<u>G01 R 33/561</u>	20060101
CIPN	<u>G01 R 33/48</u>	20060101

US-CL-ISSUED: 600/410; 324/312, 324/316, 324/319, 382/128, 382/131

US-CL-CURRENT: 600/410; 324/312, 324/316, 324/319, 382/128, 382/131

FIELD-OF-CLASSIFICATION-SEARCH: 600/407, 600/410, 324/312, 324/316, 324/300, 324/309, 382/128, 382/131

See application file for complete search history.



scan," Proc. SMRM. (1992), p. 4514.

Yang et al. "Multi-Gradient Echo with Susceptibility Inhomogeneity Compensation (MGESIC): Demonstration of fMRI in the Olfactory Cortex at 3.0 T," Depts. of Radiology (Center for NMR Research) and Neurology and Behavioral Science, Pennsylvania State University, College of Medicine. (1997) pp. 331-335.

Young et al. "The Benefits of Increasing Spatial Resolution as a Means of Reducing Artifacts due to Field Inhomogeneities," Magnetic Resonance Imaging. (1988) vol. 6, pp. 585-590.

Jesmanowicz et al. "Single-Shot Half k-Space High-Resolution Gradient-Recalled EPI for fMRI at 3 Tesla," Biophysics Research Institute, Medical College of Wisconsin. (1998) pp. 754-762.

Mao et al. Intravoxel rephasing of spins dephased by susceptibility effect for EPI sequences, ISMRM, (1999) p. 1982.

Song, A.W. "Single-shot EPI with signal recovery from the susceptibility-induced losses," Magnetic Resonance in Medicine. vol. 46, No. 2, Aug., 2001, pp. 407-411.

Wiggins et al. "Dual-Echo EPI: an fMRI method for regions of varying B0 homogeneity," Proc. SMRM, Sixth Scientific Meeting and Exhibition, Sydney Australia. vol. 2, Apr. 18-24, 1998, p. 1449.

International Search Report, PCT/US 01/32277, Mar. 27, 2002, 6 pages.

ART-UNIT: 3737

PRIMARY-EXAMINER: Lateef; Marvin M.

ASSISTANT-EXAMINER: Lin; Jeoyuh

ATTY-AGENT-FIRM: Myers Bigel Sibley & Sajovec, P.A.

#### ABSTRACT:

Signal recovery in functional magnetic resonance imaging (fMRI) is provided by generating a single excitation pulse and exciting a target region of a subject with the generated excitation pulse. A first image is obtained using a first partial k-space frame of the target region. A compensation pulse is generated and the target region excited with the compensation pulse. A second, compensated, image is obtained subsequent to the excitation by the compensation pulse using a second partial k-space frame of the target region. The first and second images are combined to form a combined image of the target region. The first and second obtaining steps are carried out sequentially during a single quadratic excitation pulse.

39 Claims, 10 Drawing figures

Full	Title	Citation	Print	Review	Classification	Date	Reference			Claims	AMC	Unsol. U.
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☐ 2. Document ID: US 6377833 B1 Relevance Rank: 65

L30: Entry 13 of 14

File: USPT

Apr 23, 2002

US-PAT-NO: 6377833

DOCUMENT-IDENTIFIER: US 6377833 B1

TITLE: System and method for computer input of dynamic mental information

☐ 3. Document ID: US 20020082497 A1 Relevance Rank: 65

L30: Entry 6 of 14

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020082497  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020082497 A1

TITLE: MRI imaging methods using a single excitation

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Song, Allen W.	Chapel Hill	NC	US

APPL-NO: 09/978514 [PALM]  
DATE FILED: October 15, 2001

RELATED-US-APPL-DATA:

Application is a non-provisional-of-provisional application 60/241999, filed October 20, 2000,

INT-CL-PUBLISHED: [07] A61B 5/055

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPN	G01 R 33/48	20060101
CIPS	G01 R 33/54	20060101
CIPS	G01 R 33/561	20060101

US-CL-PUBLISHED: 600/410; 324/307, 324/309

US-CL-CURRENT: 600/410; 324/307, 324/309

REPRESENTATIVE-FIGURES: 2A

ABSTRACT:

Signal recovery in functional magnetic resonance imaging (fMRI) is provided by generating a single excitation pulse and exciting a target region of a subject with the generated excitation pulse. A first image is obtained using a first partial k-space frame of the target region. A compensation pulse is generated and the target region excited with the compensation pulse. A second, compensated, image is obtained subsequent to the excitation by the compensation pulse using a second partial k-space frame of the target region. The first and second images are combined to form a combined image of the target region. The first and second obtaining steps are carried out sequentially during a single quadratic excitation pulse.

CLAIM OF PRIORITY

[0001] The present application claims priority from U.S. Provisional Patent Application Ser. No. 60/241,999 filed Oct. 20, 2000, the disclosure of which is incorporated by reference herein as if set forth fully herein

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	K00C	Draw D
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☐ 4. Document ID: US 7102352 B2 Relevance Rank: 65

L30: Entry 7 of 14

File: USPT

Sep 5, 2006

US-PAT-NO: 7102352

DOCUMENT-IDENTIFIER: US 7102352 B2

TITLE: Method and system for image artifact reduction using nearest-neighbor phase correction for echo planar imaging

DATE-ISSUED: September 5, 2006

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20060066307 A1	March 30, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hinks; Richard Scott	Waukesha	WI		US
Mock; Bryan James	Lake Mills	WI		US
Collick; Bruce David	Madison	WI		US
Frigo; Frederick Joseph	Waukesha	WI		US
Shubhachint; Tejaswini	Waukesha	WI		US

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
General Electric Company	Schenectady	NY		US	02

APPL-NO: 11/083269 [PALM]

DATE FILED: March 17, 2005

RELATED-US-APPL-DATA:

us-provisional-application US 60615208 00 20040930

INT-CL-ISSUED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G01V3/00	20060101	G01V003/00

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	G01 V 3/00	20060101

US-CL-ISSUED: 324/318; 324/309

☐ 5. Document ID: US 20060066307 A1 Relevance Rank: 65

L30: Entry 4 of 14

File: PGPB

Mar 30, 2006

PGPUB-DOCUMENT-NUMBER: 20060066307

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060066307 A1

TITLE: Method and system for image artifact reduction using nearest-neighbor phase correction for echo planar imaging

PUBLICATION-DATE: March 30, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Hinks; Richard Scott	Waukesha	WI	US
Mock; Bryan James	Lake Mills	WI	US
Collick; Bruce David	Madison	WI	US
Frigo; Frederick Joseph	Waukesha	WI	US
Shubhachint; Tejaswini	Waukesha	WI	US

APPL-NO: 11/083269 [PALM]

DATE FILED: March 17, 2005

RELATED-US-APPL-DATA:

us-provisional-application US 60615208 20040930

INT-CL-PUBLISHED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G01V3/00	20060101	G01V003/00

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	<u>G01 V 3/00</u>	20060101

US-CL-PUBLISHED: 324/309; 324/307

US-CL-CURRENT: 324/309; 324/307

ABSTRACT:

A nearest neighbor phase correction technique is implemented to reduce image artifacts due to phase errors in data acquired in an EPI scan. Image quality for EPI applications, such as DWI, DTI, and fMRI, is improved.

CROSS-REFERENCE TO RELATED APPLICATION

[0001] The present invention claims the benefit of U.S. Provisional Application Ser. No. 60/615,208 filed Sep. 30, 2004.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	DOC	Drawings
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☐ 6. Document ID: US 7098662 B2 Relevance Rank: 65

L30: Entry 8 of 14

File: USPT

Aug 29, 2006

US-PAT-NO: 7098662

DOCUMENT-IDENTIFIER: US 7098662 B2

TITLE: Method and system of MR imaging with variable readout gradient filtering

DATE-ISSUED: August 29, 2006

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20060066308 A1

March 30, 2006

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Hinks; Richard Scott

Waukesha

WI

US

Mock; Bryan J.

Lake Mills

WI

US

Collick; Bruce D.

Madison

WI

US

Frigo; Frederick Joseph

Waukesha

WI

US

ASSIGNEE-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

TYPE CODE

General Electric Company

Schenectady

NY

US

02

APPL-NO: 11/083272 [PALM]

DATE FILED: March 17, 2005

RELATED-US-APPL-DATA:

us-provisional-application US 60615208 00 20040930

INT-CL-ISSUED:

TYPE IPC

DATE

IPC-OLD

IPCP G01V3/00

20060101

G01V003/00

INT-CL-CURRENT:

TYPE IPC

DATE

CIPP G01 V 3/00

20060101

US-CL-ISSUED: 324/318; 324/309

US-CL-CURRENT: 324/318; 324/309

FIELD-OF-CLASSIFICATION-SEARCH: 324/309, 324/307, 324/318, 324/319, 324/300, 324/322, 600/410, 600/422

See application file for complete search history.

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5151656</u>	September 1992	Maier et al.	
<u>5672969</u>	September 1997	Zhou et al.	
<u>6259250</u>	July 2001	Mock	
<u>6501274</u>	December 2002	Ledden	324/318
<u>6728568</u>	April 2004	Yatsui et al.	600/410

## OTHER PUBLICATIONS

Ahn et al., A New Phase Correction Method in NMR Imaging Based on Autocorrelation and Histogram Analysis, IEEE Transaction on Medical Imaging, vol. MI-6, No. 1, Mar. 1987, pp. 32-36. cited by other

Grieve et al., Elimination of Nyquist Ghosting Caused by Read-Out to Phase-Encode Gradient Cross-Terms in EPI, Magnetic Resonance in Medicine 47:337-343 (2002), pp. 337-343. cited by other

Roemer et al., The NMR Phased Array, Magnetic Resonance in Medicine 16 (1990), pp. 192-225. cited by other

Pruessmann et al., SENSE: Sensitivity Encoding for Fast MRI, Magnetic Resonance in Medicine 42-952-962 (1999), pp. 952-962. cited by other

ART-UNIT: 2859

PRIMARY-EXAMINER: Shrivastav; Brij B.

ATTY-AGENT-FIRM: Ziolkowski Patent Solutions Group, SC Della Penna; Michael A. Horton; Carl B.

## ABSTRACT:

A method and system of MR imaging where variable readout gradient filtering (VRGF) is carried out after MR data acquired during gradient field transitions has been phase-corrected. Thus, phase errors can be removed prior to VRGF re-sampling of the MR data. As such, image artifacts due to phase errors can be reduced, improving image fidelity and reducing ghosting especially for poorly calibrated systems.

20 Claims, 6 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw. De

☐ 7. Document ID: US 20060066308 A1      Relevance Rank: 64

L30: Entry 3 of 14

File: PGPB

Mar 30, 2006

PGPUB-DOCUMENT-NUMBER: 20060066308

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060066308 A1

TITLE: Method and system of MR imaging with variable readout gradient filtering

PUBLICATION-DATE: March 30, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Hinks; Richard Scott	Waukesha	WI	US
Mock; Bryan J.	Lake Mills	WI	US
Collick; Bruce D.	Madison	WI	US
Frigo; Frederick Joseph	Waukesha	WI	US

APPL-NO: 11/083272 [PALM]

DATE FILED: March 17, 2005

RELATED-US-APPL-DATA:

us-provisional-application US 60615208 20040930

INT-CL-PUBLISHED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G01V3/00	20060101	G01V003/00

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	<u>G01 V 3/00</u>	20060101

US-CL-PUBLISHED: 324/309

US-CL-CURRENT: 324/309

ABSTRACT:

A method and system of MR imaging where variable readout gradient filtering (VRGF) is carried out after MR data acquired during gradient field transitions has been phase-corrected. Thus, phase errors can be removed prior to VRGF re-sampling of the MR data. As such, image artifacts due to phase errors can be reduced, improving image fidelity and reducing ghosting especially for poorly calibrated systems.

CROSS-REFERENCE TO RELATED APPLICATION

[0001] The present invention claims the benefit of U.S. Provisional Application Ser. No. 60/615,208 filed Sep. 30, 2004.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FILE	Draw. U.
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☐ 8. Document ID: US 20050009003 A1 Relevance Rank: 64

L30: Entry 5 of 14

File: PGPB

Jan 13, 2005

PGPUB-DOCUMENT-NUMBER: 20050009003

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050009003 A1

☐ 9. Document ID: US 20060106543 A1 Relevance Rank: 64

L30: Entry 2 of 14

File: PGPB

May 18, 2006

PGPUB-DOCUMENT-NUMBER: 20060106543

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060106543 A1

TITLE: Method for analyzing effectiveness of pharmaceutical preparation

PUBLICATION-DATE: May 18, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Deco; Gustavo	Vilassar de Mar		ES
Galm; Norbert	Zorneding		DE
Stetter; Martin	Munchen		DE

APPL-NO: 10/524000 [PALM]

DATE FILED: July 24, 2003

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
DE	102 36 630.6	2002DE-102 36 630.6	August 9, 2002

PCT-DATA:

DATE-FILED	APPL-NO	PUB-NO	PUB-DATE	371-DATE
Jul 24, 2003	PCT/DE03/02497			Oct 11, 2005

INT-CL-PUBLISHED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G06F19/00	20060101	G06F019/00

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	<u>G06 F 19/00</u>	20060101

US-CL-PUBLISHED: 702/019

US-CL-CURRENT: 702/19

ABSTRACT:

The activity of a pharmaceutical preparation or medicament on a neuronal structure is analyzed by subjecting a neuronal structure to the influence of a pharmaceutical preparation. Signals describing neuronal activities in the neuronal structure under the influence of the pharmaceutical preparation are detected and statistically evaluated to determine indicators for the neuronal structure under the influence of the pharmaceutical preparation. The indicators describe the activity of the pharmaceutical preparation.



Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Draw U
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☐ 10. Document ID: US 6292683 B1 Relevance Rank: 64

L30: Entry 14 of 14

File: USPT

Sep 18, 2001

US-PAT-NO: 6292683

DOCUMENT-IDENTIFIER: US 6292683 B1

TITLE: Method and apparatus for tracking motion in MR images

DATE-ISSUED: September 18, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gupta; Sandeep Narendra	Baltimore	MD		
Sussman; Marshall	Toronto			CA
Wright; Graham	Toronto			CA

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
General Electric Company	Milwaukee	WI			02

APPL-NO: 09/313910 [PALM]

DATE FILED: May 18, 1999

INT-CL-ISSUED: [07] A61B 5/055

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPS	G06 T 3/00	20060101
CIPS	A61 B 5/055	20060101

US-CL-ISSUED: 600/410; 324/307, 324/309

US-CL-CURRENT: 600/410; 324/307, 324/309

FIELD-OF-CLASSIFICATION-SEARCH: 324/307, 324/309, 324/306, 600/410, 600/416, 600/413

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4716368</u>	December 1987	Haacke	324/309
<u>4761613</u>	August 1988	Hinks	324/309
<u>5111820</u>	May 1992	Axel et al.	600/410

The present invention relates to magnetic resonance imaging (MRI) and includes a method and apparatus to track motion of anatomy or medical instruments, for example, between MR images. The invention includes acquiring a time series of MR images of a region of interest, where the region of interest contains the anatomy or structure that is prone to movement, and the MR images contain signal intensity variations. The invention includes identifying a local reference region in the region of interest of a reference image and acquired from the time series. The local reference region of the reference image is compared to that of the other MR images and a translational displacement is determined between the local reference region of the reference image and of another MR image. The translational displacement has signal intensity invariance and can accurately track anatomy motion or the movement of a medical instrument during an invasive procedure. The translational displacement can be used to align the images for automatic registration, such as in myocardial perfusion imaging, MR angiography, fMRI, or in any other procedure in which motion tracking is advantageous. Two implementations of the invention are disclosed, one in which a correlation coefficient is calculated and used to determine the translational displacement, and one in which the images are converted to a binary image by thresholding and after computation of a filtered cross-correlation, a signal peak is located and plotted as the translational displacement.

60 Claims, 4 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FILE	Draw. U
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☐ 11. Document ID: US 7053618 B2      Relevance Rank: 64

L30: Entry 10 of 14

File: USPT

May 30, 2006

US-PAT-NO: 7053618

DOCUMENT-IDENTIFIER: US 7053618 B2

**\*\* See image for Certificate of Correction \*\***

TITLE: Method and apparatus to generate an RF excitation consistent with a desired excitation profile using a transmit coil array

DATE-ISSUED: May 30, 2006

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20050110488 A1

May 26, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Zhu; Yudong	Clifton Park	NY		US

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
General Electric Company	Schenectady	NY		US	02

APPL-NO: 10/723312      [PALM]

DATE FILED: November 26, 2003

ART-UNIT: 2859

PRIMARY-EXAMINER: Shrivastav; Brij B.

ATTY-AGENT-FIRM: Ziolkowski Patent Solutions Group, SC

## ABSTRACT:

A system composed of multiple transmit coils with corresponding RF pulse synthesizers and amplifiers is disclosed. A method of designing RF pulses specific to each transmit coil to induce spatiotemporal variations in a composite B.sub.1 field is also disclosed. The present invention supports faithful production of desired excitation profiles and accommodates the use of any coil array geometry. The present invention also supports reduction in excitation pulse length. Through effective B.sub.1 field maps for each transmit coil, mutual coupling and other inter-coil correlations are accounted for in the RF pulse design.

24 Claims, 16 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	DOC	Draw U
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☐ 12. Document ID: US 7075302 B2      Relevance Rank: 64

L30: Entry 9 of 14

File: USPT

Jul 11, 2006

US-PAT-NO: 7075302

DOCUMENT-IDENTIFIER: US 7075302 B2

TITLE: Method and apparatus to generate an RF excitation consistent with a desired excitation profile using a transmit coil array

DATE-ISSUED: July 11, 2006

## PRIOR-PUBLICATION:

DOC-ID

DATE

US 20050134268 A1

June 23, 2005

## INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Zhu; Yudong

Clifton Park

NY

US

## ASSIGNEE-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

TYPE CODE

General Electric Company

Schenectady

NY

US

02

APPL-NO: 11/057472      [PALM]

DATE FILED: February 14, 2005

## RELATED-US-APPL-DATA:

continuation parent-doc US 10723312 00 20031126 PENDING child-doc US 11057- 472

## ABSTRACT:

A system composed of multiple transmit coils with corresponding RF pulse synthesizers and amplifiers is disclosed. A method of designing RF pulses specific to each transmit coil to induce spatiotemporal variations in a composite B.sub.1 field is also disclosed. The present invention supports faithful production of desired excitation profiles and accommodates the use of any coil array geometry. The present invention also supports reduction in excitation pulse length. Through effective B.sub.1 field maps for each transmit coil, mutual coupling and other inter-coil correlations are accounted for in the RF pulse design.

20 Claims, 16 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	References			Claims	Date	Drawings
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☐ 13. Document ID: US 20060120584 A1      Relevance Rank: 63

L30: Entry 1 of 14

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TITLE: Method and system for automatic diagnosis of possible brain disease

PUBLICATION-DATE: June 8, 2006

## INVENTOR-INFORMATION:

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## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
IL	139655	2000IL-139655	November 14, 2000

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US-CL-PUBLISHED: 382/128; 382/224, 600/410

US-CL-CURRENT: 382/128; 382/224, 600/410

## ABSTRACT:

A method and system for automatic diagnosis of possible brain disease is based on at least one brain scan image of a patient containing at least one feature of interest and a corresponding result of a medical profile analysis of the patient. A database containing parameters associated with at least one feature of a plurality of brain scan images each compiled from respective patient data and inserted into the database is searched so as to extract from the database a set of respective parameters each associated with the at least one feature and wherein in respect of each feature at least one of the corresponding parameters is indicative of a brain disease profile. The set of respective parameters is analyzed to determine a statistically significant brain disease profile which fits the patient based on the at least one feature of interest of the patient's brain scan image.

## RELATED APPLICATIONS

[0001] This is a continuation-in-part of U.S. Ser. No. 10/437,448 filed Nov. 12, 2001 now abandoned entitled "A method and a system for combining automated medical and psychiatric profiling from combined input images of brain scans with observed expert and automated interpreter using a neural network" and having priority Nov. 14, 2000.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	Keywords	Drawings
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☐ 14. Document ID: US 7042220 B2 Relevance Rank: 63

L30: Entry 11 of 14

File: USPT

May 9, 2006

US-PAT-NO: 7042220

DOCUMENT-IDENTIFIER: US 7042220 B2

TITLE: Magnetic resonance imaging system and method

DATE-ISSUED: May 9, 2006

## PRIOR-PUBLICATION:

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December 8, 2005

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 Liu, et al., the Measured T2\* of human brain with macroscopic field inhomogeneity compensation at 7 Tesla, Proc. Intl. Soc. Mag. Reson, Med 9, p. 1352, (2001). cited by other

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ART-UNIT: 2859

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#### ABSTRACT:

An method for producing magnetic resonance imaging data is disclosed. An example embodiment of the method includes acquiring a series of M images at a plurality of echo times using a multi-echo pulse sequence. A compensation gradient is added as a blipped gradient in the slice direction before the first image acquisition and between each subsequent image acquisitions to compensate for static magnetic field inhomogeneities. The method also includes repeating the step of acquiring the series of M images N times. The compensation gradient is set to a predetermined value for each acquisition. The method further includes combining the N acquired images for each of the M echo times to obtain M corrected images, computing a map of T.sub.2\* values from the M corrected images, and storing data representing the N acquired images and the M corrected images. Systems and computer readable media for implementing the method are also disclosed.

18 Claims, 7 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGS	Drawing
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Term	Documents
(29 AND 23) .PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD.	14
(L29 AND L23 ) .PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD.	14

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